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DATE MAILED: 12/15/2006

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-----------------|----------------------|---------------------|------------------|
| 10/625,300 | 07/22/2003 | Nicholas Atkins | ATKN101CIP | 7878 |
| 21658 | 7590 12/15/2006 | | EXAM | INER |
| DYKAS, SHAVER & NIPPER, LLP P.O. BOX 877 BOISE, ID 83701-0877 | | NGUYEN, TUAN N | | |
| | | | ART UNIT | PAPER NUMBER |
| , | | • | 3751 | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) | | | | |
|--|---|---|--|--|--|--|
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| . Office Action Summary | 10/625,300 | ATKINS ET AL. | | | | |
| Cinco nouch Cumuly | Examiner | Art Unit | | | | |
| The SAAU INC DATE of this communication and | Tuan N. Nguyen | 3751 | | | | |
| The MAILING DATE of this communication app Period for Reply | ears on the cover sheet with the c | orrespondence address | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | 6(a). In no event, however, may a reply be tim within the statutory minimum of thirty (30) days ill apply and will expire SIX (6) MONTHS from to cause the application to become ABANDONE | ely filed s will be considered timely. the mailing date of this communication. O (35 U.S.C. § 133). | | | | |
| Status | | | | | | |
| 1)⊠ Responsive to communication(s) filed on 03 No | ovember 2006. | , | | | | |
| | action is non-final. | | | | | |
| ·= | ,— | | | | | |
| ,— | closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | |
| Diamonition of Claims | | | | | | |
| Disposition of Claims | | | | | | |
| I) Claim(s) 1-3,5-9,11-20 and 24-26 is/are pending in the application. | | | | | | |
| 4a) Of the above claim(s) <u>26</u> is/are withdrawn from consideration. | | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | |
| · _ | S) Claim(s) 1-3,5-9,11-20,24 and 25 is/are rejected. | | | | | |
| , | · · · · · · · · · · · · · · · · · · · | | | | | |
| 8) Claim(s) are subject to restriction and/or election requirement. | | | | | | |
| Application Papers | | | | | | |
| 9)☐ The specification is objected to by the Examiner. | | | | | | |
| 10) \boxtimes The drawing(s) filed on <u>03 March 2006</u> is/are: a) \square accepted or b) \boxtimes objected to by the Examiner. | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | | |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: | | | | | | |
| Certified copies of the priority documents have been received. | | | | | | |
| 2. Certified copies of the priority documents have been received in Application No | | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage | | | | | | |
| application from the International Bureau (PCT Rule 17.2(a)). | | | | | | |
| * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| | , | | | | | |
| Attachment(s) | | | | | | |
| 1) Notice of References Cited (PTO-892) | 4) Interview Summary | | | | | |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | Paper No(s)/Mail Da 5) Notice of Informal Pa | te atent Application (PTO-152) | | | | |
| Paper No(s)/Mail Date | 6) Other: | | | | | |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 11/3/06 have been fully considered but they are not persuasive as follow.

The applicant argues that the Atkins reference seal (Fig. 6) will not rolls radially when subject to axial compression. The examiner agrees that upper member 52 move toward the lower member 54 when subject to axial compression; however, the Atkins reference clearly discloses that in lines 2-4 of page 14 that "the vertical body member 53 will tend to collapse, by either radially inward or outward compression." Therefore, the lip 52 would inherently experience the radial movement and downward movement in a "predictable and controlled manner" as inherent by the designed structural, which would broadly meet the claimed limitation since specific degree of rolling has never been claimed.

With respect to the applicant's argument against the obviousness rejection that there is no motivation to combine, the examiner disagrees because the obvious variation or combination is taught in and by the same reference or the common knowledge from one of ordinary skill in the same art.

The applicant argues in item 18 of the remark section that the ridges of Atkins are vertically projecting O-rings, which do not constitute ridges. The projections (165) in Atkins' Fig. 17 are circular projections from a surface; therefore, they are certainly capable of being the equivalent of the applicant's ridges, which are also circular projections from a surface.

Election/Restrictions

2. Newly submitted claim 26 is directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: the "lip rolls radially towards a configuration in which the lip and part of the body define a tube" in lines 3-4 is directed to the non-elected species of Fig. 1-4.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claim 26 is withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Drawings

3. The drawings filed 3/3/06 are objected to because the undercut of Fig. 2 and the ridges of Fig. 5 are not the same as that of the original drawings; therefore, they are considered as new matter. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after

the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

- 4. The following is a quotation of the first paragraph of 35 U.S.C. 112:
 - The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
- 5. Claims 1-3, 5-9, 11-20 and 24 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. While the original specification discloses the lip rolling in a predictable manner, it fails to disclose the new added limitation "controlled manner" in line 4 of claim 1. Therefore, it is considered as new matter.
- 6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 7. Claims 1-3, 5-9, 11-20 and 24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the

subject matter which applicant regards as the invention. It is unclear as to what the applicant is trying to claim by the limitation "controlled manner" in line 4 of claim 1.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 9. Claims 1-3, 5-9, 11-13, 16-18, 20, 24 and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 00/09825 (hereinafter Atkins).

In regard to claims 1, 5, 6, 8, 11, 18 and 22, Atkins discloses a seal (Fig. 6) comprising a generally tubular and substantially resilient body (1) for location between two members to be connected, the body comprising an interior sealing member (about 1A or 53), a deformable lip (52) for abutting one of the members to be connected and having a sealing face (about 52) adapted to form a sealing contact with a surface (40) of the member, the lip being arranged such that the sealing face of the lip would inherently deforms by a radially outer portion of the lip rolling in a predictable and "controlled manner" (see the description for Fig. 6 on page 13) when subject to axial compression. The lip provides a generally cylindrical surface profile that is substantially hemicylindrical.

In regard to claims 2 and 3, the body (1) is generally tapered and is generally frustoconical, with an upper portion (1A, 1B) being of greater diameter than the lower portion (1C).

In regard to claim 7, a highest point (about 52) of the lip is positioned radially outward of a mid-point (about 53) of the adjacent body wall (see Fig. 6).

In regard to claim 9, the body (1) further comprises a shoulder (54) located spaced from the lip (52), for spacing the lip from the second member to be connected.

In regard to claims 12 and 13, the above lip would inherently comprise frictionincreasing formations thereon since it is made of elastomeric material.

In regard to claims 16 and 17, the above body further comprises a sealing portion having protrusion (22A, 22B) on an outer surface of a body wall for forming a seal between the body and the second member to be connected.

In regard to claim 20, the interior sealing member (about 1A or 53) would inherent deform when subject to force exerted by a member to be connected since the seal is made from elastomeric material.

In regard to claim 24, the lip is certainly capable of being deformed without buckling in a similar manner as that of the applicant's lip.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 10. Claims 14, 15, 19 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Atkins.

In regard to claims 14, 15 and 25, although the Atkins lip does not include ridges thereon extending substantially circumferentially around the lip as claimed, attention is directed to Fig. 17 of Atkins, which discloses an analogous seal which further includes a lip (167) having ridges (define by 165) thereon extending substantially circumferentially around the lip to increase the sealing effect with the abutting member (see page 18, line 26 et seq.). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ, on the seal of Fig. 6 of Atkins, ridges as, for example, taught by Fig. 17 of Atkins in order to increase the sealing effect with the abutting member.

In regard to claim 19, although the Atkins interior sealing member does not include a diaphragm extending radially within the body as claimed, attention is directed to Fig. 18 of Atkins, which discloses an analogous seal which further includes an interior sealing member (176) that is a diaphragm extending radially within the body. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ, on the seal of Fig. 6 of Atkins, the diaphragm sealing member as, for example, taught by Fig. 18 of Atkins in order to increase the sealing effect with the abutting member.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to whose telephone number is 571-272-4892. The examiner can normally be reached on Monday-Friday (10:00-6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Huson can be reached on (571) 272-4887. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tuan Nguyen

Primary Examiner

Art Unit 3751